

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the Application.

Listing of Claims:

- B³
1. (Currently amended) A communication mechanism for transferring information between different processes each residing on a processor separately coupled to a data storage system, said communication mechanism being allocated from the data storage system comprising:

at least one interface integrated into each process for enabling the transfer of information from one process to another process where the data is transferred from one process to the other process through the data storage system, and the at least one interface is a socket is allocated from a shared memory region in the data storage system by one of the processes, wherein the socket is not bound to any specific destination address and this socket interface is used by a series of calls contained in a socket library to establish a connection between said processes, and begin said transfer of information.

2. (Canceled)

3. (Currently Amended) The communication mechanism of claim 1 2, wherein said processes run on different host processors and each processor is connected to said data storage system.

4. (Canceled)

5. (Original) The communication of claim 1, in which said at least one interface communicates with a protocol in communication with said data storage system.

6. (Canceled)

7. (Canceled)

8. (Currently Amended) The communication mechanism of claim 1 7, in which said allocation of said socket interface is done by using at least one of said plurality of computer system calls to request said socket interface from said data storage system.

B³
9. (Original) The communication mechanism of claim 1, wherein said communication mechanism can be used with processes performing different functions.

10. (Currently Amended) In a network having a plurality of computer system calls, said computer system calls available to a user of a first process residing on a first processor to begin and facilitate communication with a second process residing on a second host processor, through a data storage system, wherein the first and second processors are separately coupled to the data storage system, said computer system calls comprising:

a first call within said process to obtain a communication mechanism that is an interface from said data storage system, wherein said first call selects a transfer means and a desired type of communication, wherein the interface is a socket that is allocated from a shared memory region in said data storage system by one of the processes, wherein the socket is not bound to any specific destination address;

a second call within said first process to create a local address for said first process to use with said communication mechanism; and

a third call within said first process to create a connection between said first process and said second process, wherein said third call connects said first process to said second process.

11. (Original) The plurality of computer system calls of claim 10, wherein said plurality of computer system calls includes calls to use said communication mechanism to transfer information between said first and said second process through said data storage system.

12. (Original) The plurality of computer system call of claim 11, further comprising:

a fourth call in which either of said first process is an initiating process and sends information to said second process through said data storage system.

13. (Original) The plurality of computer system calls of claim 12, further comprising:

a fifth call in which said second receives information from said first processes.

14. (Original) The plurality of computer system calls of claim 13, further comprising:

a sixth call to terminate said connection between said first and said second processes.

15. (Original) The plurality of computer system calls of claim 14, wherein said first and said second processes each reside on a different host processor, and each said host processor is connected to said data storage system.

16. (Currently Amended) A method for transferring information between at least first and second processes residing on processors separately connected to a data storage system via the data storage system, the method comprising the steps of:

B³
creating a communication mechanism that is at least one interface integrated into each process for enabling connection between each process and the transfer of information from one process to another process where the data is transferred from one process to the other process through the data storage system, and the at least one interface is a socket that is allocated from a shared memory region in the data storage system by one of the processes, and wherein the socket is not bound to any specific destination address;

~~using said communication mechanism to create a connection between said first process and said second process; and~~
~~transferring information from said first process via said data storage system to said second process.~~

17. (Original) The method of claim 16, wherein said first and said second processes reside on different host processors, and said host processors are connected to said data storage system.

18. (Currently Amended) The method of claim 17 including a termination step for enabling one process to terminate said connection to said ~~second~~ other process.

19. (Canceled)

20. (Currently Amended) A system comprising:

a plurality of host processors, wherein each host processor includes a plurality of processes resident on of each of said host processors;

a local storage area connected to each of said plurality of host processors;
a data storage system separate from said plurality of host processors and
connected to each of said plurality of host processors; and

B³
a communication mechanism that is at least one interface that is resident within
each one of said plurality of processes, in which information stored in said local storage
area is transferred by one of said communication mechanisms via said data storage
system to said communication mechanism resident within another one of said plurality
of processes, and the at least one interface is a socket is allocated from a shared memory
region in the data storage system by one of the processes, wherein the socket is not
bound to any specific destination address and this socket interface is used by a series of
calls contained in a socket library to establish a connection between said processes, and
begin a transfer of information between processes.

21. (Canceled)

22. (Currently Amended) The system of claim 20 ~~21~~, wherein said communication
mechanism is allocated individually to each of said plurality of processes by said data
storage system when said interface requests said data storage system to allocate said
communication to said process.

23. (Original) The system of claim 22, wherein said data storage system further
comprises a control block table containing a plurality of available communication
mechanisms, said control block table allocating said communications mechanisms upon
a request from one of said processes.

24. (Original) The system of claim 23, said data storage system having a plurality of storage devices, said control block table being stored on at least one of said plurality of storage devices.

25. (Original) The system of claim 20, said plurality of host processors having different operating systems.

B³
26. (Currently Amended) A data storage system for transferring information from a first process to a second process, each of which is running on a selected one of a plurality of host processors that are separately connected to said data storage system, said data storage system comprising:

a plurality of storage devices;

a shared storage region to which both of said first and second processes share access;

a control block table implemented in at least one of said plurality of storage devices; and

wherein said control block table allocates a communication mechanism that is at least one interface for said first process which said first process uses to establish a connection to said second process through said shared memory storage region, and wherein the at least one interface is resident within each one of said plurality of processes, in which information stored in said local storage area is transferred by one of said communication mechanisms via said data storage system to said communication mechanism resident within another one of said plurality of processes, and the at least one interface is a socket that is allocated from the shared memory region in the data

Applicant: Yael Melman
U.S.S.N.: 09/933,906
Filing Date: November 15, 2000
EMC Docket No.: EMC-97-028CON1

B³
storage system by one of the processes, wherein the socket is not bound to any specific
destination address and this socket interface is used by a series of calls contained in a
socket library to establish a connection between said processes, and begin a transfer of
information between processes.
